

under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 19-0036.

*Amendments*

*In the Claims:*

✓  
Please cancel claims 30-43 without prejudice or disclaimer. Applicants reserve the right to prosecute the subject matter contained therein in one or more divisional/continuation applications.

Please amend the following claim:

Please substitute the following claim 1 for the pending claim 1:

A1  
1. (Once amended) A reverse transcriptase having reverse transcriptase activity which has been modified or mutated to increase or enhance thermostability wherein said mutation or modification that increase or enhance thermostability is not in the RNase H domain with the proviso that said reverse transcriptase is not a Murine Moloney Leukemia Virus (M-MLV) reverse transcriptase with a methionine mutation at amino acid position valine 223.

Please add the following new claim:

A2  
49. (New) A mutant reverse transcriptase comprising one or more mutations corresponding to one or more amino acid positions of MMLV reverse transcriptase selected from the group consisting of leucine 52, tyrosine 64, lysine 152, histidine 204, methionine 289, threonine 306, tyrosine 133, threonine 197, phenylalanine 309, arginine

A2  
cont.

116, glutamine 190, and valine 223 with the proviso that said reverse transcriptase is not a Murine Moloney Leukemia Virus (M-MLV) reverse transcriptase with a methionine mutation at amino acid position valine 223.

50. (New) The mutant reverse transcriptase of claim 49, wherein said reverse transcriptase is an MMLV reverse transcriptase.